Commercial Bank Lending Data during the Crisis: Handle with Care

Since the financial crisis began in mid-2007, media sources and academics alike have scrutinized data from the banking sector to understand how lending to consumers and firms has changed. "Total loans and leases" by commercial banks are the sum of real estate loans, individual loans, commercial and industrial loans, and other loans. This measure is part of the H.8 data, which provide weekly aggregate balance sheet data for commercial banks with a charter in the United States. If considered over the past three decades, the series appears approximately on trend but slightly erratic during the current recession; total loans and leases remains fairly constant until the end of 2008:Q3, when it increases sharply and then declines.

If our goal is to understand changes in lending dynamics, particularly over the past few quarters, does this series imply that commercial bank lending increased in the last few months of 2008 and then bank lending to the public contracted? Not quite. Several reasons suggest reading such data with extreme care.1

First, existing loans and leases at each point in time are equilibrium quantities that depend on the interaction between the supply and demand of credit. Whether the observed decrease in the series is caused by banks restricting their lending or by borrowers demanding less credit during a major recession remains unclear.

Second, commercial banks are responsible for only a fraction (about 35 percent) of financial intermediation in the U.S. economy. The H.8 release does not include the loans of other intermediaries ( thrifts and non-depository institutions); therefore, just because we do not observe a large contraction in this volume of total loans and leases does not mean that a contraction in the overall economy has not occurred. In fact, evidence suggests that other credit markets have been severely strained.2

Third, since the onset of the crisis, several financial services companies and thrifts that made loans to consumers and firms (but whose loans were not included in the H.8 release) have either become commercial banks or have been acquired by commercial banks. When a commercial bank acquires a thrift, an insurance company, or another financial firm, the loans of the target (acquired) company suddenly appear as additional commercial bank loans even though no real change in credit took place in the economy. Many such transactions have occurred since the crisis began, creating an upward shift to the series that cannot be interpreted as an increase in lending. (Take, for example, the acquisition of the banking operations of Washington Mutual by JPMorgan Chase on September 25, 2008.)

Fourth, evidence indicates that firms and individuals are taking advantage of their previously unused (but committed) bank credit lines, just as they did in previous periods of credit contraction.3 If banks grant only a handful of new loans but borrowers continue to draw on existing lines of credit available at commercial banks, the end result would appear to be an increase in lending. At the same time, commercial banks may be withdrawing part of their commitments, which would not be recorded in balance sheet and H.8 data.

Finally, this series may be affected by the programs implemented by the Treasury and the Federal Reserve (for example, the Troubled Asset Relief Program or the Term Auction Facility) and may have been very different without these interventions.

These caveats indicate that caution is necessary when making inferences based solely on aggregate loans data.

—Silvio Contessi and Hoda El-Ghazaly


Views expressed do not necessarily reflect official positions of the Federal Reserve System.
### National Economic Trends

**Household Survey Employment**

<table>
<thead>
<tr>
<th>Year</th>
<th>Thousands</th>
<th>Change</th>
<th>Percent change</th>
<th>Percent change 1 year ago</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>139240</td>
<td>1511</td>
<td>1.1</td>
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<tr>
<td>2005</td>
<td>141714</td>
<td>2474</td>
<td>1.8</td>
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</tr>
<tr>
<td>2006</td>
<td>144402</td>
<td>2707</td>
<td>1.9</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>146050</td>
<td>1629</td>
<td>1.1</td>
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<tr>
<td>2008</td>
<td>142368</td>
<td>-581</td>
<td>-0.5</td>
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</table>

**Nonfarm Payroll Employment**

<table>
<thead>
<tr>
<th>Year</th>
<th>Thousands</th>
<th>Change</th>
<th>Percent change</th>
<th>Percent change 1 year ago</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>131419</td>
<td>1423</td>
<td>1.1</td>
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<tr>
<td>2005</td>
<td>133669</td>
<td>2280</td>
<td>1.7</td>
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<td>2006</td>
<td>139096</td>
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<td>1.8</td>
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<tr>
<td>2007</td>
<td>137604</td>
<td>1507</td>
<td>1.1</td>
<td></td>
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<tr>
<td>2008</td>
<td>137046</td>
<td>-558</td>
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</table>

**Nonfarm Aggregate Hours**

<table>
<thead>
<tr>
<th>Year</th>
<th>Index</th>
<th>Monthly change</th>
<th>Annual change</th>
<th>Year change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>100.2</td>
<td>0.2</td>
<td>0.8</td>
<td>1.6</td>
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<tr>
<td>2005</td>
<td>102.7</td>
<td>0.7</td>
<td>2.8</td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>105.8</td>
<td>0.8</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>107.3</td>
<td>0.5</td>
<td>1.4</td>
<td></td>
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<tr>
<td>2008</td>
<td>106.2</td>
<td>0.2</td>
<td>-1.0</td>
<td></td>
</tr>
</tbody>
</table>

**Real Final Sales and GDP**

<table>
<thead>
<tr>
<th>Year</th>
<th>Percent change</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>6.0</td>
<td>108.5</td>
</tr>
<tr>
<td>2009</td>
<td>5.4</td>
<td>106.9</td>
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</tbody>
</table>

**Industrial Production and ISM Index**

<table>
<thead>
<tr>
<th>Year</th>
<th>Percent change</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>0.3</td>
<td>56.0</td>
</tr>
<tr>
<td>2009</td>
<td>-0.5</td>
<td>55.0</td>
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</table>

**Aggregate Private Nonfarm Hours**

<table>
<thead>
<tr>
<th>Year</th>
<th>Percent change</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>0.3</td>
<td>108.5</td>
</tr>
<tr>
<td>2009</td>
<td>0.7</td>
<td>109.2</td>
</tr>
</tbody>
</table>

**Real Change in Private Inventories**

<table>
<thead>
<tr>
<th>Year</th>
<th>Billion of 2000 dollars</th>
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</thead>
<tbody>
<tr>
<td>2008</td>
<td>-2.0</td>
</tr>
<tr>
<td>2009</td>
<td>-1.5</td>
</tr>
</tbody>
</table>

### Research Division

Federal Reserve Bank of St. Louis

**Nominal Gross Domestic Product**

<table>
<thead>
<tr>
<th>Year</th>
<th>Percent change</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>6.8</td>
<td>111.3</td>
</tr>
<tr>
<td>2009</td>
<td>5.5</td>
<td>111.3</td>
</tr>
</tbody>
</table>

**Average Weekly Private Nonfarm Hours**

<table>
<thead>
<tr>
<th>Year</th>
<th>Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>35.0</td>
</tr>
<tr>
<td>2009</td>
<td>34.6</td>
</tr>
</tbody>
</table>

**Inventory-Sales Ratio**

<table>
<thead>
<tr>
<th>Manufacturing</th>
<th>December</th>
<th>January</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>3.0</td>
<td>3.2</td>
</tr>
<tr>
<td>2009</td>
<td>3.1</td>
<td>3.3</td>
</tr>
</tbody>
</table>
Output per Hour and Capacity Utilization, Manufacturing

Percent change from year ago

Utilization Rate (level) (right scale)

Output per Hour (left scale)

*Data from 1997 to the present are on a NAICS basis; data prior to 1997 are on an SIC basis and are not strictly comparable (see End Note).

Nonfarm Compensation per Hour

Percent change from year ago

Nominal

Real

Output per Hour, Nonfarm Business and Nonfinancial Corporations

Percent change from year ago

Nonfinancial Corporations

Nonfarm Business Sector

NIPA Chain Price Indexes

Compounded annual rates of change

GDP (bar)

CPI (bar)

Producer Price Index, Finished Goods

Compounded annual rates of change

PPR (bar)

Employment Cost Index

Percent change from year ago

Compensation

Wages and Salaries

Oil & Natural Gas Prices: Spot & Futures

Compounded annual rates of change

Spot Gas (left scale)

Spot Oil (left scale)

Gas Futures (right scale)

Note: Futures prices as of 7/31/09.

Compensation per Hour

Compounded annual rates of change

Wages and Salaries